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| 10/054,245 | 01/24/2002 | Douglas Ross Cardy | CCK94028RE | 3727 |
| 25537 VERIZON PATENT MANAGEMENT GROUP 1320 North Court House Road 9th Floor ARLINGTON, VA 22201-2909 | 7590 08/18/2009 | | <div>EXAMINER</div> <div>PHAN, JOSEPH T</div> | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patents@verizon.com

Office Action Summary

Application No.

10/054,245

Applicant(s)

CARDY ET AL.

Examiner

JOSEPH T. PHAN

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Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-57, 59, 61 and 62 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-10 is/are allowed.
- 6) ☒ Claim(s) 1-8, 11-57, 59, 61 and 62 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-51, 53-54, 56-57, 59, and 61-62 have been considered but are moot in view of the new ground(s) of rejection.

It is noted for future amendments, please remove the underline from claims that are not currently amended to conform to proper USPTO procedures.

Allowable Subject Matter

2. Claims 1-8 would be allowable if rewritten or amended to overcome the rejection under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Claims 9-10 are allowed.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-8 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 lines 12 and 14 recite "in call" which is unclear and confusing as it is not known if this is an 'incoming call', a different call, or part of the 'call' in line 9. It appears it is a different call from line 9 as line 12 recites 'the call' which distinctly refers to the call in line 9. Dependent claims 5, 6, 7, and 8 previously recited 'a first call', 'a second call', 'a third call', and a 'fourth call', therefore the term 'in call' cannot be assumed to be referring to the call in line 9.

Claims 2-8 are rejected as being dependent on claim 1.

Appropriate clarification and/or correction is required.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 45, 51 and 53-54 rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 45, 51 and 53-54 merely recite an apparatus comprising 'logic', wherein 'logic' is merely software and therefore is non-statutory subject matter.

Appropriate clarification and/or correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 11-51, 53-54, 56-57, 59, and 61-62 are rejected under 35 U.S.C. 102(e) as being anticipated by Bartholomew et al., Patent #5,712,903.

Regarding claim 11, Bartholomew teaches an apparatus (Fig. 1, 4, 9, and col.12 lines 1-5) comprising: switch intelligence configured to: receive notification of a facility related event associated with a call from a switch fabric, (*col.6 lines 28-33 and col.7 lines 23-36*), wherein the switch intelligence is implemented in a separate network element from a network element implementing the switch fabric and the facility related event is received as raw or unprocessed

data which is associated with user activity at a telephone device, (*col.6 lines 28-33 and col.8 lines 1-11; off-hook is facility related event*),

execute a call state machine, the call state machine being responsive to the notification of the facility related event and representing processing of the call as at least one call segment, wherein the at least one call segment corresponds to a call half (*col.6 lines 34-65, col.8 lines 9-34, and col.10 lines 10-64; IP incorporating into Fig.3*), provide an association between the at least one call segment and at least one physical device associated with completing the call, and provide connection information to the switch fabric based on the association, (*col.8 lines 35-62*).

Regarding claim 12, Bartholomew, as applied to claim 11, teaches wherein said network element implementing the switch intelligence is physically separated from said network element implementing the switch fabric and is coupled to the network element implementing the switch fabric via a communications network, (*Fig.1,4, 9; intelligent SCP/IP is physically separate from SSP*).

Regarding claim 13, Bartholomew, as applied to claim 11, teaches wherein the network element implementing said switch intelligence is logically separated from the network element implementing said switch fabric, (*Fig.1,4, 9; intelligent SCP/IP is logically separate from SSP*).

Regarding claim 14, Bartholomew, as applied to claim 11, teaches further comprising:
a switch-fabric proxy service for providing a normalized interface between said switch fabric and a switch intelligence for communications involving said switch fabric, wherein said switch-fabric proxy service translates communications defined according to a uniform interface into switch-fabric communications(*col.10 lines 10-19; application interface is between switch*

fabric and switch intelligence).

Regarding claim 15, Bartholomew, as applied to claim 14, teaches wherein each of said API comprises at least one vendor-specific API or a switch fabric specific API(col.7 lines 10-13).

Regarding claim 22, Bartholomew teaches an apparatus (Fig. 1, 4, 9, and col.12 lines 1-5) comprising:

a switch intelligence for providing control functions to at least one switch fabric, (*col.6 lines 28-33 and col.7 lines 23-36*),), the switch intelligence comprising: processing logic configured to: receive information from the at least one switch fabric, the information including a facility related event associated with a call, process the received information, (*col.6 lines 28-33 and col.8 lines 1-11; off-hook is facility related event*), maintain call states in accordance with a call model for at least one party involved in the call, (col.6 lines 34-65, col.8 lines 9-34, and col.10 lines 42-64), and provide connection information to the at least one switch fabric for completing the call(col.8 lines 35-62).

Regarding claim 23, Bartholomew, as applied to claim 22, teaches wherein said switch intelligence is one of logically separated or physically separated from said at least one switch fabric, the processing logic being further configured to: identify at least one point in the call where a telecommunications function is required, and send a request for the telecommunications function to a processor in response to the identified at least one point in the call, (col.6 lines 34-65 and col.8 lines 9-62)

Regarding claim 24, Bartholomew, as applied to claim 23, teaches a processor executing

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the telecommunications function in response to the request, (col.6 lines 34-65 and col.8 lines 9-34).

Regarding claim 25, Bartholomew, as applied to claim 22, teaches further comprising:

a switch-fabric proxy service for providing a normalized interface between said switch fabric and a switch intelligence for communications involving said switch fabric, wherein said switch-fabric proxy service translates communications defined according to a uniform interface into switch-fabric communications(*col.10 lines 10-19; application interface is between switch fabric and switch intelligence*).

Regarding claim 26, Bartholomew, as applied to claim 22, teaches wherein said switch intelligence provides control functions to a plurality of switch fabrics(col.6 lines 34-65 and col.8 lines 9-34).

Regarding claim 27, Bartholomew, as applied to claim 22, teaches wherein said switch intelligence further comprises at least one of a facility service, a call connection manager service or a call segment instance service, (col.6 lines 34-65 and col.8 lines 9-34).

Regarding claim 28, Bartholomew, as applied to claim 27, teaches wherein said at least one of a facility service, a cad connection manager service or a call segment instance service comprises a call segment instance service, the call segment instance service configured to maintain the call states for the at least one party involved in the call, (col.6 lines 34-65, col.8 lines 1-34, and col.10 lines 10-64).

Regarding claim 29, Bartholomew teaches an apparatus comprising: means for receiving switch-fabric communication from a switch-fabric, the switch-fabric communications including a facility related event information associated with a call, (col.8 lines 1-11);

means for processing the switch-fabric communications, wherein the means for processing is configured to maintain call states in accordance with a call model for at least one party involved in the call and generate connection information for Completing the call,(col.6 lines 34-65, col.8 lines 9-34, and col.10 lines 10-64; IP incorporating into Fig.3); and means for translating the connection information into switch-fabric communications for use by a switch fabric, (col.6 lines 34-65, col.8 lines 9-34, and col.10 lines 10-64; IP incorporating into Fig.3).

Regarding claim 30, Bartholomew teaches an apparatus(Fig.1, 4, and 9), comprising:
means for translating switch-fabric communications into communications defined according to a uniform switch-intelligence interface,(col.6 lines 34-65, col.8 lines 9-34, and col.10 lines 10-64; IP incorporating into Fig.3).

means for processing the switch fabric communications comprising event information associated with a call, (col.6 lines 34-65, col.8 lines 9-34, and col.10 lines 10-64), the means for processing being configured to:

maintain call states for at least one party involved in the call in accordance with a call model and execute the call model to generate connection information for completing the call, (col.6 lines 34-65, col.8 lines 9-34, and col.10 lines 10-64), and

means for translating the communications defined according to the uniform switch-intelligence interface into switch-fabric communications, (col.6 lines 34-65, col.8 lines 9-34, and col.10 lines 10-64).

Regarding claim 31, Bartholomew, as applied to claim 30, teaches means for translating communications defined according to the uniform interface into switch-intelligence communications, and means for translating switch-intelligence communications into

communications defined according to a uniform interface, (col.6 lines 34-65, col.8 lines 9-34, and col.10 lines 10-64).

Regarding claim 32, Bartholomew teaches an apparatus(Fig.1, 4, and 9) comprising:
a switch-fabric proxy service that is capable of at least one of translating switch-fabric communications into switch-intelligence communications, translating the switch-intelligence communications into the switch-fabric communications, translating the switch-fabric communications into communications defined according to a uniform switch-intelligence interface, or translating the communications defined according to a uniform switch-intelligence interface into the switch-fabric communications(col.6 lines 34-65, col.8 lines 9-34, and col.10 lines 10-64); and
a switch intelligence implemented in at least one network element, the at least one network element being a separate network element from a network element implementing a switch-fabric that is coupled to the switch-fabric proxy service(col.6 lines 34-65, col.8 lines 9-34, and col.10 lines 10-64), the switch intelligence being configured to:
execute a call model to generate connection information for completing a call corresponding to a request received at a switch fabric maintain call states for at least one party, involved in the call in accordance with the call model, and forward the connection information to the switch fabric via the switch-fabric proxy service(col.6 lines 34-65, col.8 lines 9-34, and col.10 lines 10-64).

Regarding claim 33, Bartholomew, as applied to claim 32, teaches the apparatus according to claim 32, wherein said switch-fabric proxy service includes a normalized interface between the switch fabric and the switch intelligence(col.10 lines 10-20).

Regarding claim 34, Bartholomew, as applied to claim 32, teaches the apparatus according to claim 32, wherein said at least one network element implementing the switch intelligence is one of logically separated or physically separated from the network element implementing the switch fabric and is coupled to the network element implementing the switch fabric via a communications network(Fig.1, 4, and 9; intelligent SCP/IP is logically and physically separate from switch fabric).

Regarding claim 35, Bartholomew, as applied to claim 32, teaches the apparatus according to claim 32, wherein the switch fabric includes said switch-fabric proxy service(col.6 lines 34-65, col.8 lines 9-34, and col.10 lines 10-64).

Regarding claim 36, Bartholomew, as applied to claim 32, teaches the apparatus according to claim 32, wherein the switch intelligence is further configured to: maintain the call model, the call model affecting how calls received by the switch fabric will be processed and wherein the call model is modifiable at the switch intelligence without modifying the switch fabric(col.6 lines 34-65, col.8 lines 9-34, and col.10 lines 10-64).

Regarding claim 37, Bartholomew, as applied to claim 32, teaches the apparatus according to claim 32, wherein said switch-fabric proxy service includes an application programming interface for interfacing with the switch fabric(col.10 lines 10-20).

Regarding claim 38, Bartholomew, as applied to claim 32, teaches the apparatus according to claim 32, wherein said application programming interface is at least one of a vendor-specific interface or a switch-fabric-specific interface(col.7 lines 10-13 and col.10 lines 10-64)..

Regarding claim 39, Bartholomew, as applied to claim 32, teaches the apparatus according to claim 32 wherein said switch-fabric proxy service includes an application programming interface for interfacing with the switch-intelligence(col.7 lines 10-13 and col.10 lines 10-64).

Regarding claim 40, Bartholomew teaches an apparatus (Fig.1, 4, and 9) comprising: a switch intelligence network element for controlling a switch fabric network element wherein said switch intelligence network element comprises: processing logic configured to: receive notification information from the switch fabric network element associated with a call from the switch fabric network element(col. 15, lines 10-35) and perform call half processing for at least one party associated with the call in response to the notification information and in accordance with a cal model, (col.6 lines 34-65, col.8 lines 9-34, and col.10 lines 10-64).

Regarding claim 41, Bartholomew, as applied to claim 40, teaches perform the call half processing in accordance with a call model, the call model representing at least one of an Advanced Intelligent Network (AIN) call model, an International Telecommunications Union (ITU) call model or a call model created by a service provider(col.6 lines 34-65, col.8 lines 9-34).

Regarding claim 42, Bartholomew, as applied to claim 40, teaches wherein said switch intelligence network element includes at least one of a first application programming interface

communicable with a switch-fabric proxy service or a second application programming interface communicable with a feature processor that executes at least one telecommunications function, (col.6 lines 34-65, col.8 lines 9-34, and col.10 lines 10-64).

Regarding claim 43, Bartholomew, as applied to claim 40, teaches one application programming interface communicable between at least one of a facility service, a call connection manager service or a call segment instance service and another of said at least one of a facility service a call connection manager service or a call segment instance service(col.6 lines 34-65, col.8 lines 9-34, and col.10 lines 10-64).

Regarding claim 44, Bartholomew teaches an apparatus (Fig.1, 4, and 9) comprising: a feature processor for executing at least one telecommunications function, n switch intelligence configured to: receive facility related data associated with a call from a switch fabric, perform call half processing associated with at least one party to the call in response to the facility data and in accordance with a call model, (col.6 lines 34-65, col.8 lines 9-34, and col.10 lines 10-64), and provide connection information to an entity that received the call wherein the connection information identifies physical connections to complete the calls wherein the switch intelligence is implemented in at least one network element the at least one network element being a separate network element from the entity that received the call, (col.6 lines 34-65, col.8 lines 9-34, and col.10 lines 10-64).

Regarding claim 45, Bartholomew teaches an apparatus for controlling a switch fabric the apparatus being implemented in at least one network element -the at least one network element being separate from the switch fabric the apparatus comprising:

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logic for processing facility related information received from the switch fabric in accordance with a call model, logic for performing call half processing for at least one party involved in the call in response to the facility related information and in accordance with the call model; and logic for forwarding connection information to the at least one switch fabric, (col.6 lines 34-65, col.8 lines 9-34, and col.10 lines 10-64).

Regarding claim 46, Bartholomew, as applied to claim 45, teaches interface logic including a first interface for communications between the apparatus and the switch fabric(col.10 lines 10-20).

Regarding claim 47, Bartholomew teaches an apparatus comprising:
a call completion device for providing bearer functions, said call completion device performing communications with a switch intelligence that is implemented in a separate network element from said call completion device, the call completion device being configured to:
forward a facility related event associated with a call to the switch intelligence, and receive bearer connection information from the switch intelligence in accordance with a call model executed by the switch intelligence, (*col.6 lines 28-33, col.7 lines 23-36, and col.8 lines 1-11; off-hook is a facility related event*).

Regarding claim 48, Bartholomew, as applied to claim 47, teaches wherein the switch intelligence comprises a call state model and wherein the call completion device communicates with the switch intelligence to affect a call state, (col.6 lines 28-33, col.7 lines 23-36, and col.8 lines 1-11).

Regarding claim 49, Bartholomew, as applied to claim 48, teaches wherein the call state is represented in the call state model, (col.6 lines 28-33, col.7 lines 23-36, and col.8 lines 1-11).

Regarding claim 50, Bartholomew, as applied to claim 47, teaches a switch fabric proxy service for providing an application programming interface for communications between the call completion device and the switch intelligence, (col.7 lines 10-13).

Regarding claim 51, Bartholomew teaches an apparatus, comprising:
logic configured to receive information from a switch fabric that received a request for making a call, the information comprising facility related data, (*col.6 lines 28-33 and col.8 lines 1-11*),
logic configured to perform call half processing for at least a first party or a second party associated with the call in response to the facility related data and in accordance with a call model, (*col.6 lines 28-33 and col.8 lines 1-11*).
logic configured to generate connection information for the entity that received the request; and
logic configured to forward the connection information to the entity that received the request, (*col.6 lines 28-33 and col.8 lines 1-11*).

Regarding claim 53, Bartholomew, as applied to claim 51, teaches wherein the apparatus is implemented in a network element that is separate from the entity that received the request, (*col.6 lines 28-33 and col.8 lines 1-11*).

Regarding claim 54, Bartholomew, as applied to claim 51, teaches wherein the logic configured to perform call half processing maintains call states associated with completing the call in accordance with a call model, (col. 11, lines 30-35).

Regarding claims 56, 57, 59, 61 and 62, Bartholomew, as applied to claims 11, 22, 29, 40, 45, and 56, teaches wherein the facility related event comprises at least one of on-hook, off-hook or wink, (*col.6 lines 28-33 and col.8 lines 1-11; off-hook*).

6. Claims 47-50 are rejected under 35 U.S.C. 102(e) as being anticipated by LaPorta, Patent #5,434,852.

Regarding claim 47, La Porta teaches an apparatus comprising:
a call completion device for providing bearer functions, said call completion device performing communications with a switch intelligence that is implemented in a separate network element from said call completion device, (col. 2, line 44-66; col. 7, lines 11-25), the call completion device being configured to:
forward a facility related event associated with a call to the switch intelligence, (col. 7, lines 11-25), and receive bearer connection information from the switch intelligence in accordance with a call model executed by the switch intelligence, (col. 7, lines 11-25).

Regarding claim 48, La Porta, as applied to claim 47, teaches wherein the switch intelligence comprises a call state model and wherein the call completion device communicates with the switch intelligence to affect a call state, (col. 2, lines 44-66).

Regarding claim 49, La Porta, as applied to claim 48, teaches wherein the call state is represented in the call state model, (col. 2, lines 44-66).

Regarding claim 50, La Porta, as applied to claim 47, teaches a switch fabric proxy service for providing an application programming interface for communications between the call completion device and the switch intelligence, (col. 7, lines 41-65).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSEPH T. PHAN whose telephone number is (571)272-7544. The examiner can normally be reached on Mon-Fri 9am-6:30pm EST, off every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on (571) 272-7499. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joseph T Phan/
Examiner, Art Unit 2614
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